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Title : The Northern Sea Otter Population: Declines Beyond the Aleutian Islands

Category : Conservation

Student : Not Applicable

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Abstract : Since the mid-1980s, the sea otter population in southwestern Alaska has declined 56-68% and the decline in abundance may result in changes in management. Sea otter abundance is important ecologically because sea otters, through foraging, precipitate changes in distribution and abundance of kelp and forage fish in the nearshore system. During the 1990s, the sea otter population in the Aleutian archipelago declined at a rate of 17.5%/yr and overall, counts decreased by 70% throughout the archipelago by 2000. In 2000 and 2001, surveys of the Alaska Peninsula indicate abundance estimates of sea otters declined by 27-49% along the northern Peninsula and 93-94% along the southern Peninsula since 1986. Counts along the southern Alaska Peninsula coast declined by 38% in the study area but increased by 16% eastward of the study since 1989. In all study areas, sea otters were concentrated in bays and lagoons of the Peninsula, whereas historically, large rafts were distributed offshore as far as 50km. In the Kodiak archipelago, sea otter abundance estimates have declined 56% at an estimated rate of 6.7%/yr since 1989. As of 2001, there has been no population range expansion documented and overall density has decreased in the nearshore habitat in the Kodiak archipelago. Sea otter population declines are similar in all survey areas in the following ways: 1) severity, 2) the decline occurred within similar time periods, and 3) severe declines of pinniped populations have occurred in the same general region. The results of these broad-scale aerial surveys prompted the Fish and Wildlife Service to designate the southwest sea otter population stock as a candidate species under the Endangered Species Act. The population declines in southwest Alaska are one of the most significant conservation issues in our time for the northern sea otters.